

REMARKS

By the present amendment, independent claim 1 has been amended to further clarify the concepts of the present invention. In particular, claim 1 has been amended to incorporate the subject matter of dependent claim 2 therein. Accordingly, dependent claim 2 has been cancelled. In addition, dependent claims 3 through 5 have been added. Entry of these amendments is respectfully requested.

In the Office Action, claim 1 was rejected over claim 1 of the patent to Ito et al under the judicially created doctrine of obviousness type double patenting. Additionally, claim 2 was rejected over claim 1 of the same patent to Ito et al in view of the patent to Hoeschele under the judicially created doctrine of obviousness type double patenting. In making these two rejections, it was asserted that, although the claims of the application and the patent are not identical, they are obvious over the other and thus are not patentably distinct. Reconsideration of these rejections in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention which is directed to an automotive in-tank fuel hose may be quite instructive. As shown in the subject drawing, the automotive in-tank fuel hose is installed in a fuel tank and has a structure which may follow deformation of the fuel tank and absorb vibration caused by a fuel pump. For example, the structure of the automotive in-tank fuel hose may

have a bellows structure as defined in claim 3. Further, the automotive in-tank fuel hose of the present invention comprises a single layer structure formed by a specific thermoplastic elastomer containing a dimer moiety (at least one of a thermoplastic polybutylene terephthalate elastomer containing a dimer acid moiety and a thermoplastic polybutylene naphthalate elastomer containing a dimer acid moiety), wherein the dimer acid moiety is present in a proportion of 3 to 30 mol% in the thermoplastic elastomer containing a dimer acid moiety. It is submitted that such an automotive in-tank fuel hose is not taught or suggested by the cited patent to Ito et al alone or in combination with the patent to Hoeschele.

More particularly, the hose disclosed in the Ito et al patent is an ordinary fuel hose which is not used as an in-tank fuel hose. Therefore, in terms of the hose structure during use of the disclosed fuel hose, fuel will only be in contact with an inner peripheral surface of the hose and will not be in contact with an outer peripheral surface of the hose.

In distinct contrast, the fuel hose according to the present invention, as shown in the drawing, is installed within a fuel tank, and thus fuel will be in contact with an outer peripheral surface as well as an inner peripheral surface of the hose. For this reason, an outer peripheral surface as well as an inner peripheral surface of the hose require sour gasoline resistance and hydrolysis resistance as is detailed on page two, lines 14 to 21 of the present specification. To provide these resistances for both the inner and outer

peripheral surfaces of the hose, the in-tank fuel hose of the present invention, as stated above, comprises a single layer structure formed by a specific thermoplastic elastomer containing a dimer acid moiety, wherein the dimer acid moiety is present in a proportion of 3 to 30 mol% in the thermoplastic elastomer containing a dimer acid moiety.

The Ito et al patent has no recognition of the problems and the application as described in the present invention for automotive in-tank fuel hose. The Examples of the Ito et al patent only relate to hoses having either a three-layer or five-layer structure. Therefore, the automotive in-tank fuel hose of the present invention comprising a single layer structure formed by a specific thermoplastic elastomer containing a dimer acid moiety, wherein the dimer acid moiety is present in a proportion of 3 to 30 mol% in the thermoplastic elastomer containing a dimer acid moiety, can be distinguished from the hoses disclosed in the Ito et al patent. Thus, it is submitted that the presently claimed invention is unobvious over the Ito et al patent alone or in combination with the Hoeschele patent.

For the reasons stated above, withdrawal of the rejections under the judicially created doctrine of obviousness type double patenting and allowance of claims 1 and 3 through 5 over the cited Ito et al patent are respectfully requested.

Claim 1 was rejected under 35 USC § 102(a) as being anticipated by the patent to Hoeschele. In addition, claim 2 was rejected under 35 USC § 103(a) as being unpatentable over the same patent to Hoeschele. In making the former rejection, it was asserted that the cited patent teaches the entire hose as presently claimed. In the latter rejection, the same patent was then asserted to suggest the selection of the proportion of the dimer acid moiety as claimed. Reconsideration of these rejections in view of the above claim amendments and the following comments is respectfully requested.

The Hoeschele patent relates generally to segmented copolyester elastomeric polymers. It is disclosed on column 6, line 66 of the Hoeschele patent that these polymers may be used as “hydraulic hose tubes and covers.” Therefore, it is clear that the polymers are used for a covering layer of a hydraulic hose tube. Even if the disclosed polymers according to the Hoeschele patent are used to form a hose with a single layer structure, the application of the hose as a “hydraulic hose tube” is completely different from that of the in-tank fuel hose according to the presently claimed invention. In addition, the Hoeschele patent does not teach or suggest the “bellows structure” as presently claimed and a “bellows structure” cannot be adopted from a technical standpoint in the field of a “hydraulic hose tube”.

Thus, it is submitted that one of ordinary skill in the art would not be able to derive the characteristic structure of the present invention and the resulting important effects from the teachings of the Hoeschele patent. As described above, the characteristic structure of the present invention is that the hose is used as an in-tank fuel hose and comprises a single layer structure formed by a specific hose material. With such a specific hose material for the single layer structure, the outer peripheral surface as well as the inner peripheral surface of the hose have an improved sour gasoline resistance without deterioration of flexibility and also have excellent hydrolysis resistance. As a consequence, excellent properties for use as an in-tank fuel hose are achieved. It therefore is submitted that the presently claimed invention patentably distinguishes over the teachings of the Hoeschele patent.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claims 1 and 3 through 5 over the cited Hoeschele patent are respectfully requested.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit

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Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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